What Is Claimed Is:

SUB B1

1. An isolated polynucleotide encoding an enzyme with aminotransferase activity and which is at least 70% identical to a member selected from the group consisting of:
   a) SEQ ID NOS:25-32;
   b) SEQ ID NOS:25-32 wherein T can also be U;
   c) nucleic acid sequences complementary to a) and b); and
   d) fragments of a), b) or c) that are at least 15 bases in length and that hybridize to DNA which encodes the amino acid sequences of SEQ ID NOS:25-32 under moderate to highly stringent conditions.

2. The polynucleotide of claim 1, wherein the polynucleotide is DNA.

3. The polynucleotide of claim 1, wherein the polynucleotide is RNA.

4. The polynucleotide of claim 2 which encodes the enzyme of SEQ ID NO:25.

5. The polynucleotide of claim 2 which encodes the enzyme of SEQ ID NO:26.

6. The polynucleotide of claim 2 which encodes the enzyme of SEQ ID NO:27.

7. The polynucleotide of claim 2 which encodes the enzyme of SEQ ID NO:28.

8. The polynucleotide of claim 2 which encodes the enzyme of SEQ ID NO:29.

9. The polynucleotide of claim 2 which encodes the enzyme of SEQ ID NO:30.

10. The polynucleotide of claim 2 which encodes the enzyme of SEQ ID NO:31.

11. The polynucleotide of claim 2 which encodes the enzyme of SEQ ID NO:32.

12. The polynucleotides of claim 1 comprising the sequences as set forth in SEQ ID NOS:17-24.

13. A vector comprising the DNA of claim 2.

14. A host cell comprising the vector of claim 13.

15. An enzyme wherein the enzyme is an aminotransferase and is selected from the group consisting of:

a) an enzyme comprising an amino acid sequence that is at least 70% identical to the amino acid sequences set forth in SEQ ID NOS:25-32; and

b) an enzyme comprising at least 30 consecutive amino acid residues homologous with an enzyme of a).

16. A protein encoding a polypeptide of claim 15.

17. A nucleic acid probe comprising an oligonucleotide from about 10 to 50 nucleotides in length and having an area of nucleotides that is at least 70% complementary to a nucleic acid target region of a nucleic acid encoding an amino acid sequence selected from the group consisting of SEQ ID NOS:25-32 and which hybridizes to the nucleic acid target region under moderate to highly stringent conditions to form a detectable target:probe duplex.

18. The probe of claim 17, wherein the oligonucleotide is DNA.

19. The probe of claim 17, wherein the oligonucleotide comprises a sequence which is at least 90% complementary to the nucleic acid target region.

20. The probe of claim 17, wherein the oligonucleotide comprises a sequence which is 95% complementary to the nucleic acid target region.

21. The probe of claim 17, wherein the oligonucleotide comprises a sequence which is 100% complementary to the nucleic acid target region.

22. The probe of claim 17, wherein the oligonucleotide is 15-50 bases in length.

23. The probe of claim 17, wherein the probe further comprises a detectable isotopic label.

24. The probe of claim 17, wherein the probe further comprises a detectable non-isotopic label selected from the group consisting of a fluorescent molecule, a chemiluminescent molecule, an enzyme, a cofactor, an enzyme substrate, and a hapten.